AI-ENABLED CLAIMS

How Claims Automation saves 60% or more for Health Insurers

MANTRA LABS

AIA

HONGKONG

CASE STUDY

Replacing manual claims
process with an **AI system**

AIA Hong Kong

AIA Group Limited, is the largest publicly listed pan-Asian life insurance group.

AIA offers financial services, retirement planning, wealth management services. as well as accident and **health insurance** coverage.

PROBLEM

More insurance renders **more claims** — **AIA** deals with high-volume claims processing everyday. The bulk of processing work is handled manually, which creates bottlenecks for adjudication and settlement.

Pain Points

◆ **Extracting information** from documents like medical invoices, diagnostic reports, hospital & pharmacy bills is both time-intensive and tedious.

◆ As the number of claims grows, it becomes **cost-intensive** to keep hiring additional resources to handle the extra caseload.

◆ They needed an unerring approach to **digitize** the extraction of individual line items like discharge summary, policy and product details.

THE REAL LIFE COMPANY

Solution
Objective

To accelerate the **Workflow** through faster document access and simpler review methods — minimizing the labour input, and in turn *reducing* operating costs.

Solution
Components

- Designed a scalable and modular architecture for the claims automation system.

- Scale was achieved by automated addition or removal of resources depending on varying loads.

- Images go through several pre-processing steps, and then run through our **proprietary ICR engine**.

- Line items are detected, and each item is then bucketed based on benefits — using **NLP analysis**.

Why Automate Claims?

Ironically, claims processing in the **modern insurance** space remains a manual, inefficient, error-prone operation.

By analysing existing practices to identify instances for automation using **new-age ICR Techniques** and **Intelligent Process Automation** — Insurers can reduce the inefficiency and inaccuracy of inputting data by hand — reducing manual processing by 60%, and the average handling time per claim by 40%.

Process
Flow

HOW AUTOMATION WORKS

Processing requires gathering information from all medical invoices, categorizing them into benefit buckets, and then finalizing the amount allowed under each head.

The system can **automate this entire process**, ruling out manual intervention in most of these cases.

INTELLIGENT PROCESS AUTOMATION — Identifying digital triggers for automation

PROPRIETARY ICR ENGINE — Extracting line items, Localizing Text & Error Correction
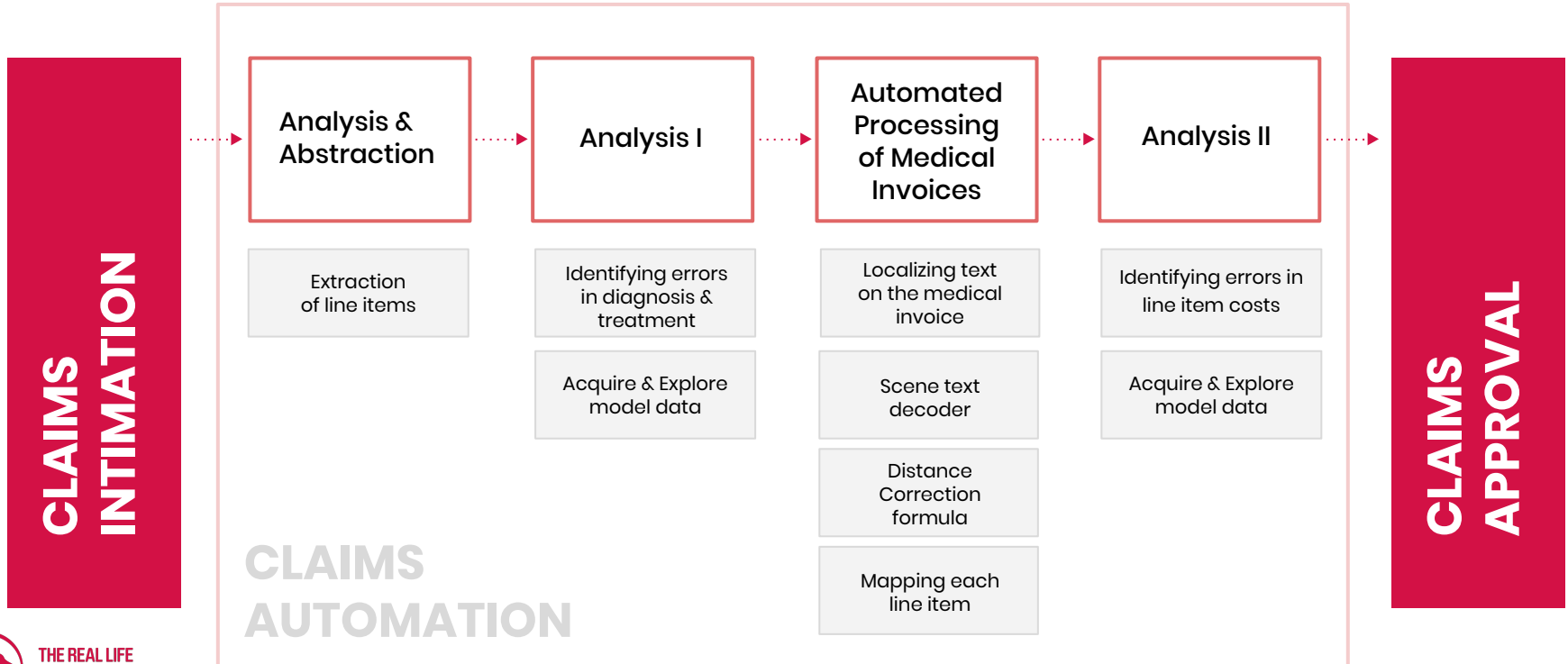
STRAIGHT THROUGH PROCESSING — Streamlined flow to final settlement via predictive engines

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Claims Automation —
Process Flow Diagram

CLAIMS INTIMATION

Analysis & Abstraction

Extraction of line items

Analysis I

Identifying errors in diagnosis & treatment

Acquire & Explore model data

Automated Processing of Medical Invoices

Localizing text on the medical invoice

Scene text decoder

Distance Correction formula

Mapping each line item

Analysis II

Identifying errors in line item costs

Acquire & Explore model data

CLAIMS APPROVAL

CLAIMS AUTOMATION

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Key
Benefits

01
Implementing a high-speed document and image viewing system.

02
Real-time, batch processing of claims documents.

03
Increased efficiency and decreased labour costs for claims processing.

04
Attract new, and retain existing customers by delighting them with faster service, even during peak seasons.

Key
Metrics

Process time reduced by

75%

Created cost-savings equivalent to 6 FTEs, for the insurer.

Overall time taken for handling a claim halved.

THE REAL LIFE
COMPANY

MANTRA LABS

- ◆ Domain Focused Products and Solutions for the Digital Insurer

- ◆ Real World Problem Solving using our expertise in AI and CX

100+
PROJECTS

150+
GEEKS

03
OFFICES

Key Partnerships

NVIDIA. IBM Watson amazon web services mongoDB

Let's build what you need, together.

Get in touch with us.

📞 +91 9738-031-122

✉️ hello@mantralabsglobal.com

🌐 www.mantralabsglobal.com

📍 Bangalore | Delaware | Gurugram